## iso-BUTYL iso-VALERATE

(Code: IBTIV)

Olfactive Note: Fruity, Ethereal, Apple-Raspberry like odor.

Used as a modifier in topnotes of fruity compositions for cosmetics applications. In flavor compositions, used to imitate Apple, Wine, Raspberry, Strawberry, Honey, Tomato, Tutti-frutti and in Hard and soft fruits.

Chemical Formula  Molecular Weight (gm/Mol)	C <sub>9</sub> H <sub>18</sub> O <sub>2</sub> 158.24	H <sub>3</sub> C O CH <sub>3</sub>	Hee	Up to 8 ppm in Flavor
Log P (o/w)	3.021	CH <sub>3</sub>	Use Level	Up to 3%
Solubility in Water @ 25 °C	136.1 mg/L	2-methylpropyl 3-meyhylbutanoate		Fragrance
Synthetic substance	Nature-Ide	ntical Artificial 🗸 Food	Grade	Kosher

PHYSICO-CHEMICAL PROPERTIES					
Appearance	Colorless to pale yellow liquid				
Purity (by GLC)	98.5% min.				
Specific Gravity	0.850 - 0.860 @ 25 °C				
Refractive Index	1.3990 - 1.4090 @ 20 ºC				
Boiling Point	168.5 °C @ 760 mmHg				
Flash Point (TCC)	38.89 °C				
Tenacity	64 Hrs at 100%				
Solubility in Ethanol	Soluble				
Acid Value	1 max. (mgKOH/gm)				
Vapour Pressure	1.840000 mmHg @ 25 °C				
Vapour Density	5.4 (Air=1)				
Heat of Vaporization (Δ <sub>vap</sub> H°)	44.01 kJ/mol				

REGULATORY REFERENCES							
CAS No.	589-59-3						
FEMA	3369						
EINECS	209-653-8						
СоЕ	568						
FL No.	09.472						
JECFA	203						
FDA Regulation	21 CFR 172.515						
Food Chemical Codex	Not listed						
REACH Pre-Reg. No.							
Export Tariff Code	2915.60.9000						
Anti-Oxidants/Stabiliz	ers	Yes		No			
Derived from GMO	?	Yes	<b>'</b>	No			
GMO as process aid	Yes	~	No				

Synonyms: Butanoic acid, 3-methyl-, 2-methylpropyl ester; Isobutyl isopentanoate; Isobutyl 3-methylpropanoate; Isovaleric acid, isobutyl ester; 2-Methylpropyl isovalerate.

Packing: As per Customer's requirement

Shelf life of 24 months from the date of manufacturing. Stable when stored in tightly

Storage: sealed containers. Keep in cool and dry area, away from direct heat and light. If stored for more than 12 months, quality should be checked before use.